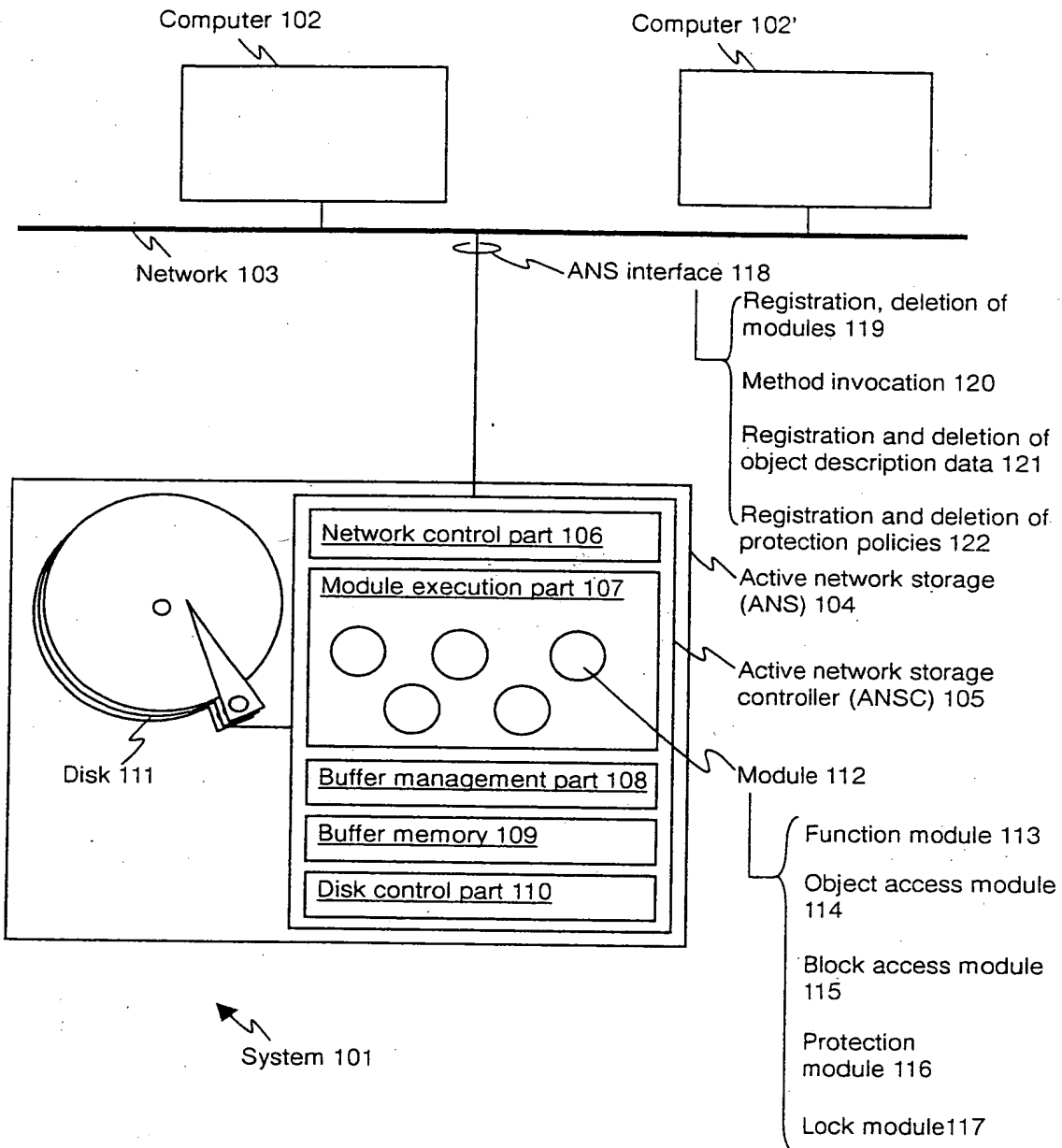


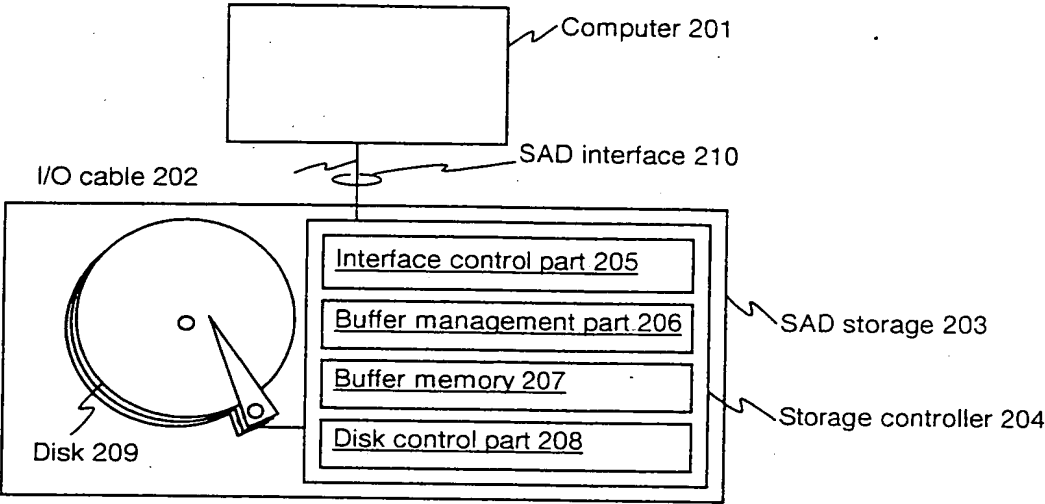


Fig. 1



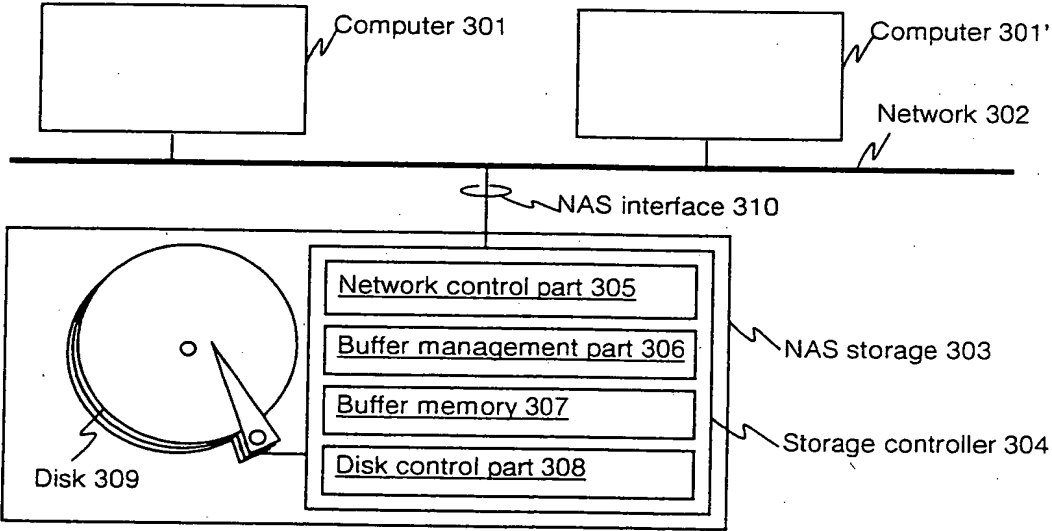
PRIOR ART

Fig. 2



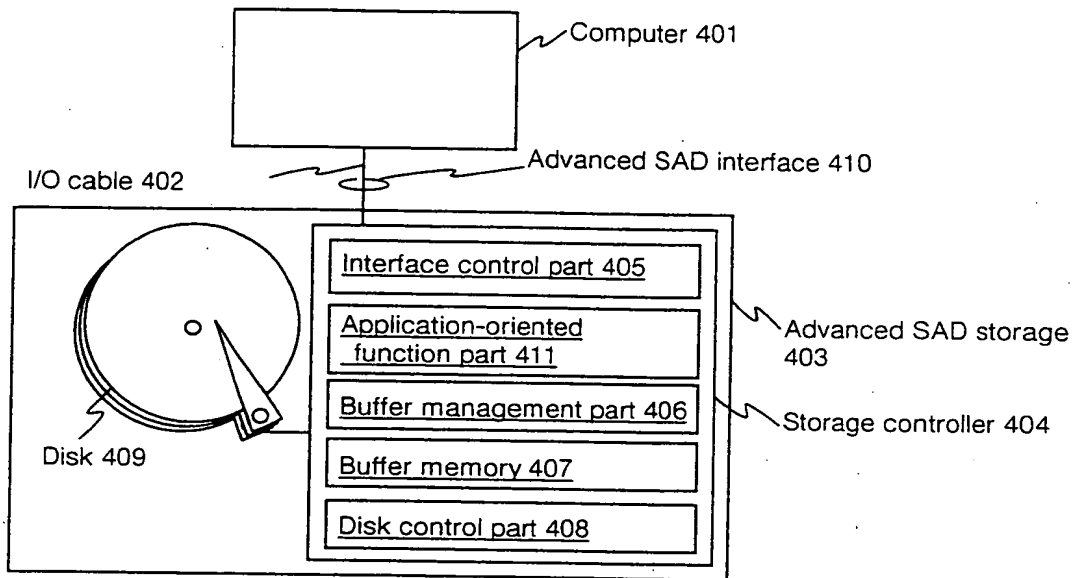
PRIOR ART

Fig. 3



PRIOR ART

Fig. 4



PRIOR ART

Fig. 5

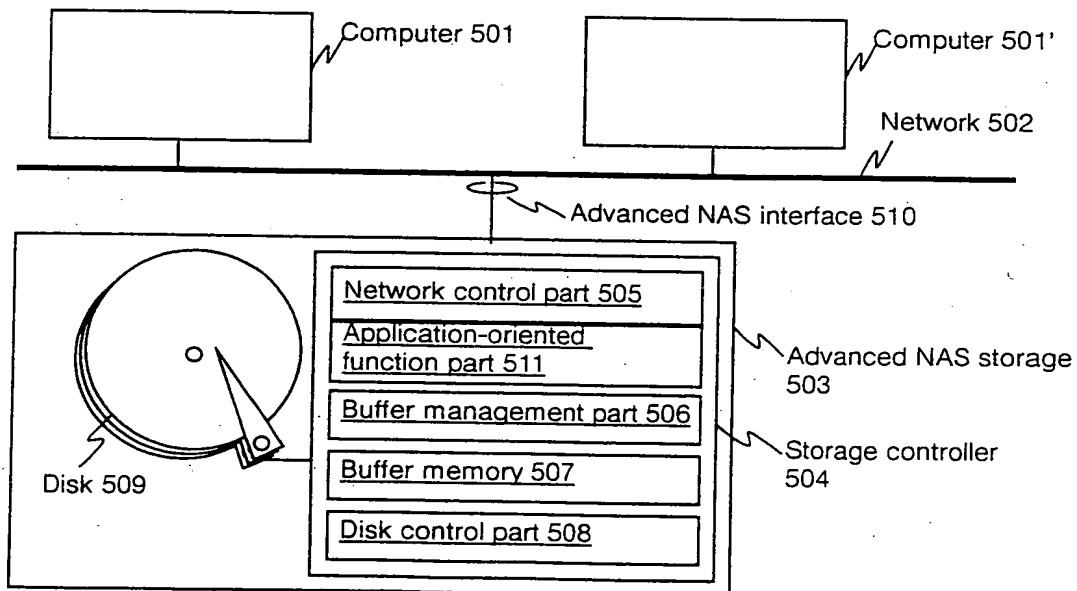


Fig. 6

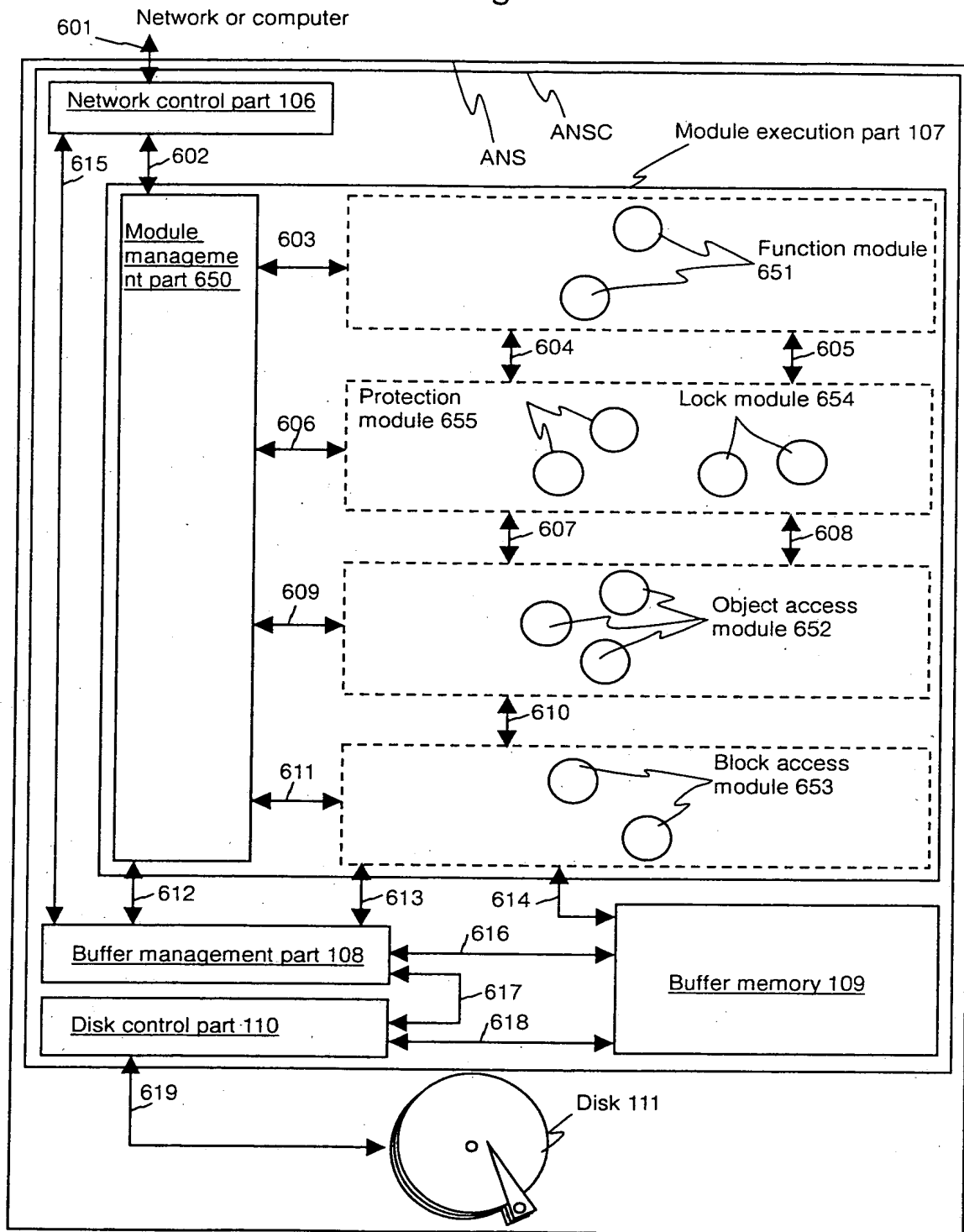


Fig. 7

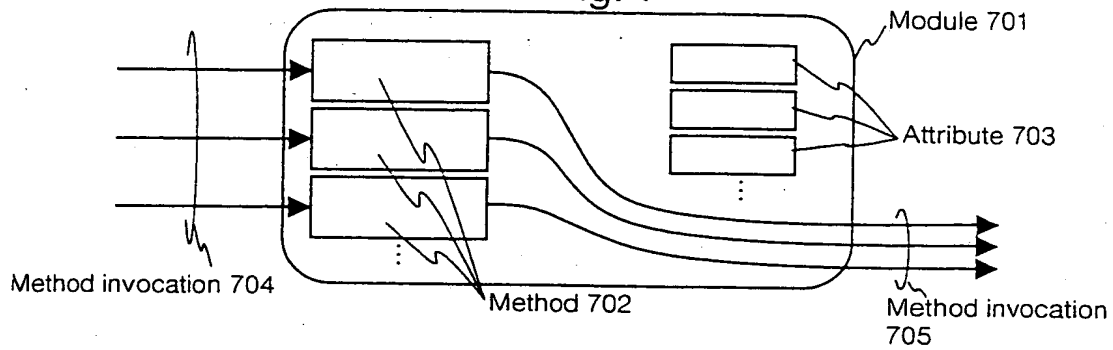


Fig. 8

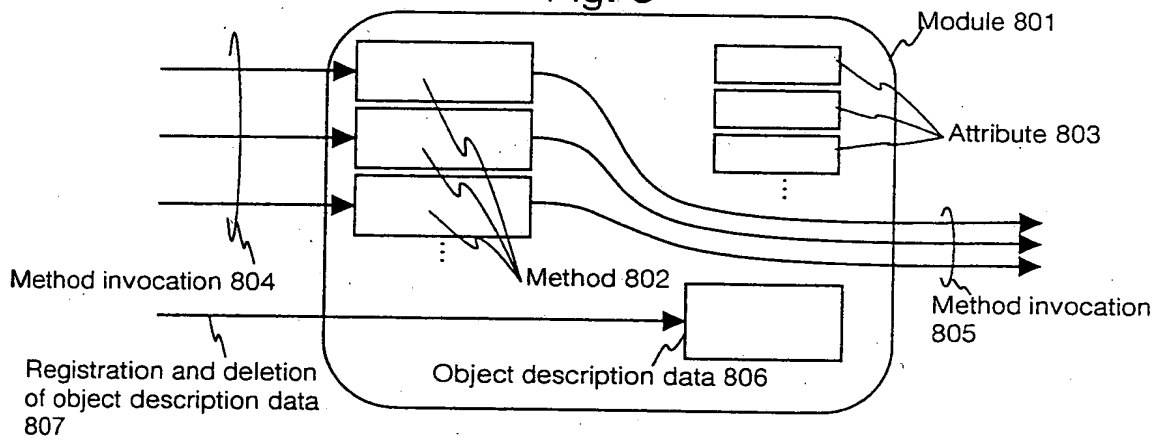


Fig. 9

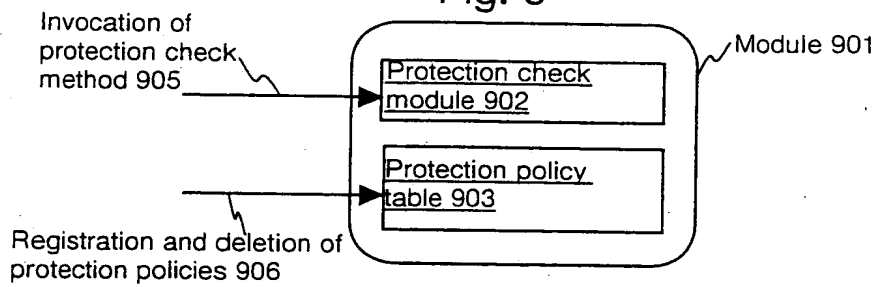


Fig. 10

Object description data (table form) 1001

<u>Tag 1002</u>	<u>Type 1003</u>	<u>Offset 1004</u>	<u>Size 1005</u>	<u>Count 1006</u>	<u>Block type 1007</u>
		:			

Fig. 11

UFS_inode object 1101

<u>Tag 1002</u>	<u>Type 1003</u>	<u>Offset 1004</u>	<u>Size 1005</u>	<u>Count 1006</u>	<u>Block type 1007</u>
di_mode	short	0	2	1	null
di_nlink	short	2	2	1	null
di_uid	short	4	2	1	null
di_gid	short	6	2	1	null
di_size	long	8	4	1	null
di_addr1	BLOCK	12	3	10	UFS_data
di_addr2	BLOCK	42	3	1	UFS_indirect1
di_addr3	BLOCK	45	3	1	UFS_indirect2
di_addr4	BLOCK	48	3	1	UFS_indirect3
di_gen	byte	51	1	1	null
di_atime	long	52	4	1	null
di_mtime	long	56	4	1	null
di_ctime	long	60	4	1	null

UFS_data3 object 1102

<u>Tag 1002</u>	<u>Type 1003</u>	<u>Offset 1004</u>	<u>Size 1005</u>	<u>Count 1006</u>	<u>Block type 1007</u>
data	byte	0	1	4096	null

UFS_indirect13 object 1103

<u>Tag 1002</u>	<u>Type 1003</u>	<u>Offset 1004</u>	<u>Size 1005</u>	<u>Count 1006</u>	<u>Block type 1007</u>
bid	BLOCK	0	4	1024	UFS_data

UFS_indirect23 object 1104

<u>Tag 1002</u>	<u>Type 1003</u>	<u>Offset 1004</u>	<u>Size 1005</u>	<u>Count 1006</u>	<u>Block type 1007</u>
bid	BLOCK	0	4	1024	UFS_indirect1

UFS_indirect3 object 1105

<u>Tag 1002</u>	<u>Type 1003</u>	<u>Offset 1004</u>	<u>Size 1005</u>	<u>Count 1006</u>	<u>Block type 1007</u>
bid	BLOCK	0	4	1024	UFS_indirect2

Fig. 12

Object description data (parser form) 1201

Tag 1202	Initialization code 1203
Context 1204	Code1205
	⋮

Fig. 13

```
create table customer (
    c_id          integer,
    c_name        char(40),
    c_address     varchar(100),
);
```

1301

132

Taq 1202	Initialization code1203
Context 1204	Code 1205
customer()	{ record = 0; column = 0; }
(record())*	null
record()	{ int saved_offset = offset; }
record_size = <long> c_id() c_name() c_address()	{ record++; column = 0; foundObject("record", record_size, saved_off, record); }
c_id()	null
value = <long>	{ column++; foundObject("c_id", value, sizeof(long), record, column); }
c_name()	null
value = <char>[40]	{ column++; foundObject("c_name", value, sizeof(char)*4, record, column); }
c_address()	null
column_size = <long> value = <char>[column_size]	{ column++; foundObject("c_address", value, sizeof(char)*4, record, column); }

Fig. 14

Object description data (pattern matching form) 1401

<u>File format</u> 1402	<u>Tag</u> 1403	<u>Pattern</u> 1404
shell_script	header1	"#!"
	header2	"/bin/sh"
UNIX_executable	header1	ZMAGIC NMAGIC OMAGIC
⋮		

Fig. 15

Protection policy description data 1501

<u>Sender 1502</u>	<u>Receiver 1503</u>	<u>Method 1504</u>	<u>Allow/Deny</u> 1505
selectionModule	recordAccessModule	getObject("column")	Allow
selectionModule	blockAccessModule	getBlock()	Deny
		⋮	

Fig. 16

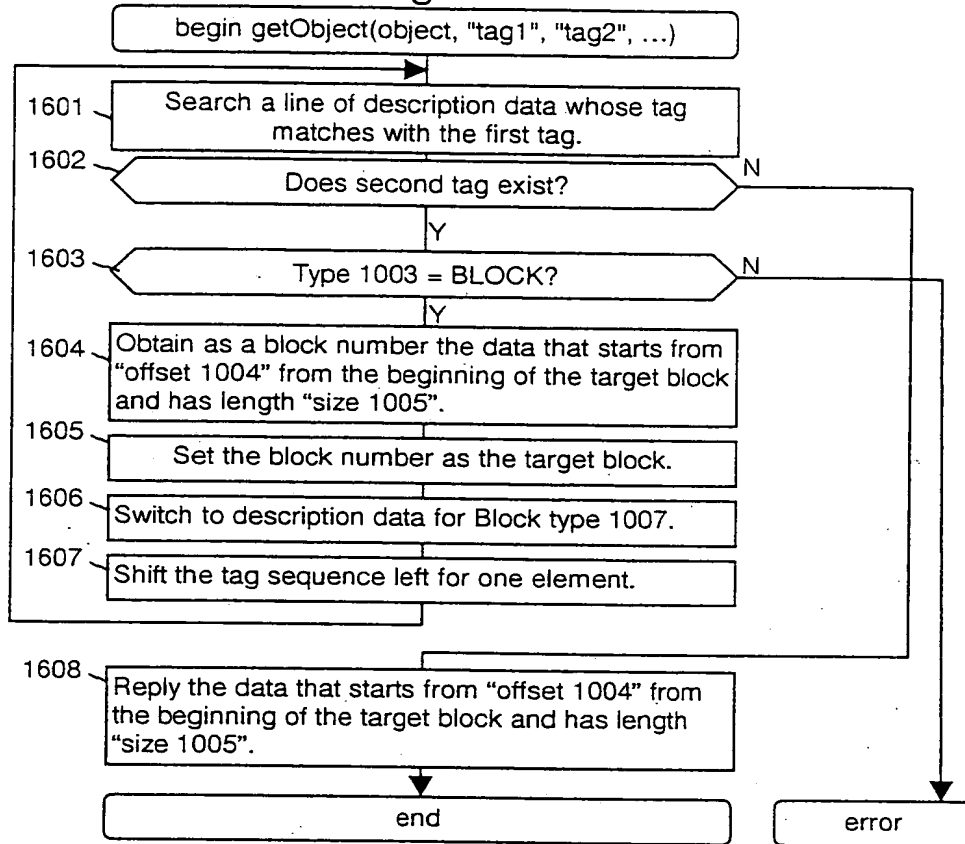


Fig. 17

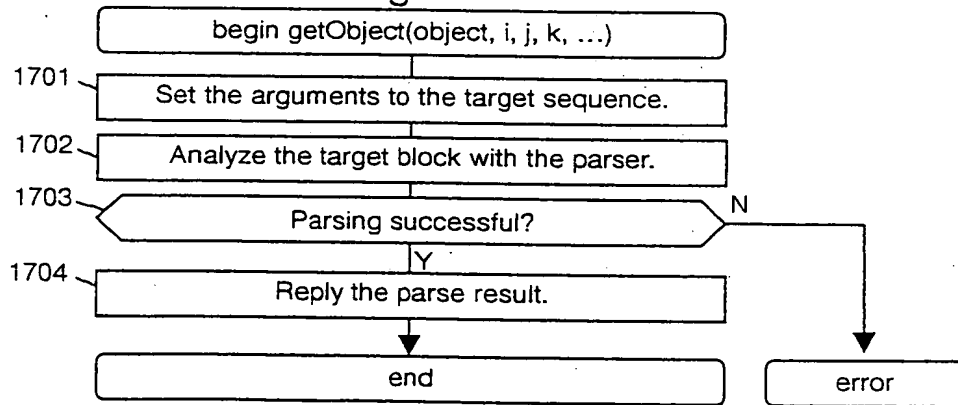


Fig. 18

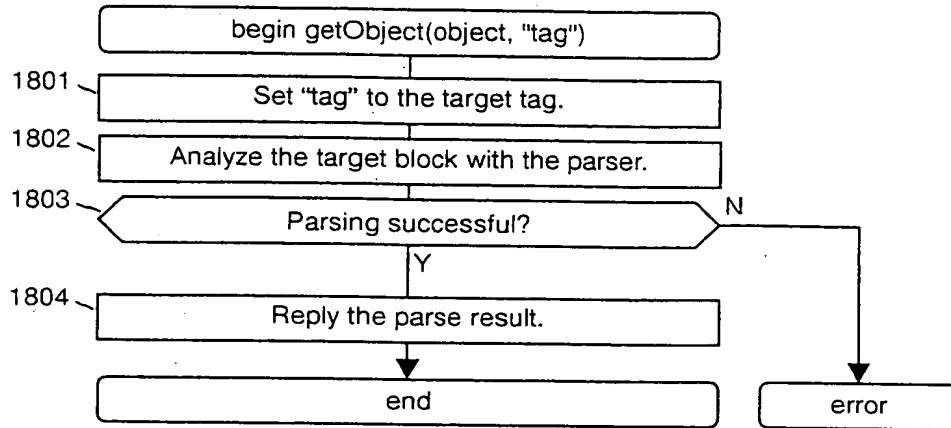


Fig. 19

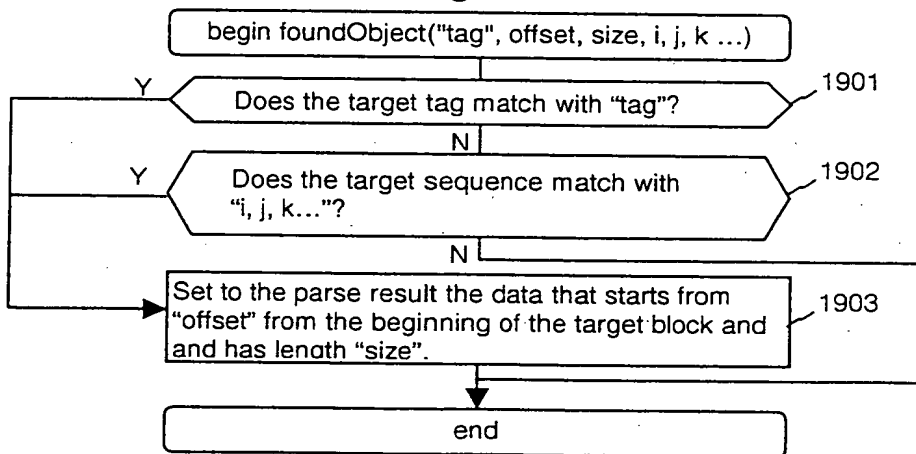


Fig. 20

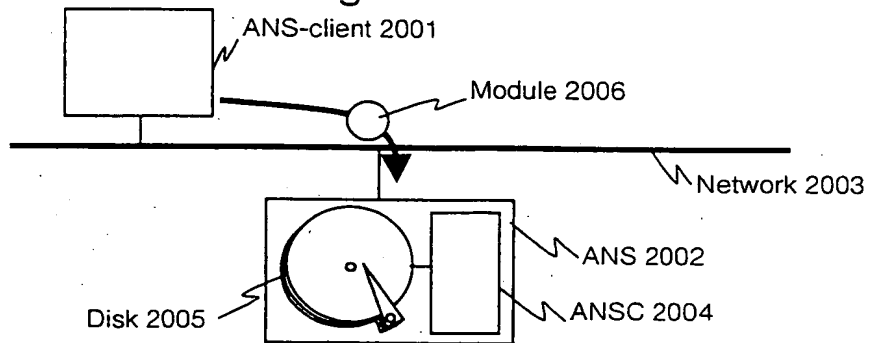


Fig. 21

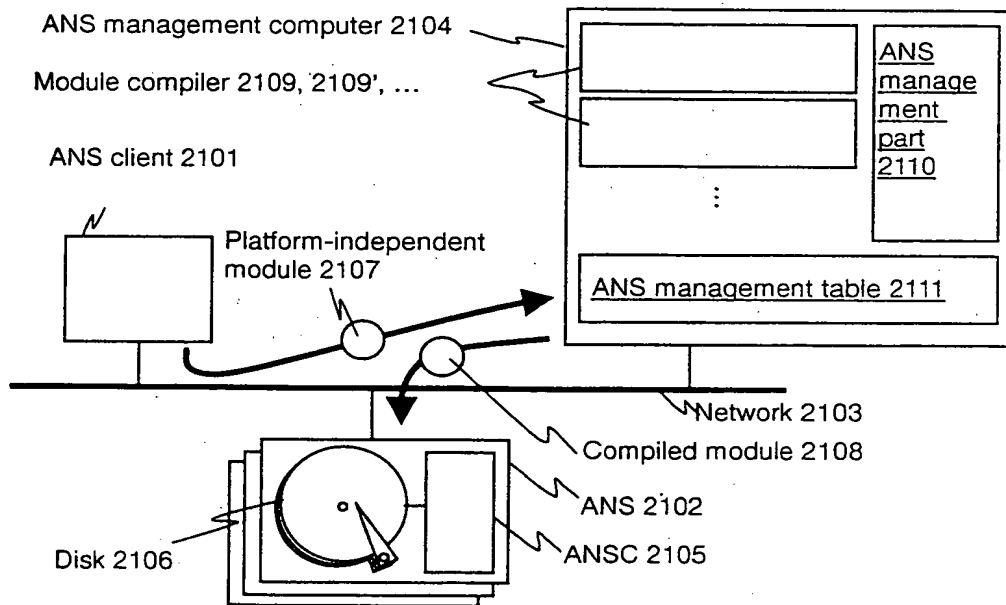


Fig. 22

ANS management table 2201

<u>ANS name 2202</u>	<u>Network address 2203</u>	<u>Model 2204</u>	<u>Compiler 2205</u>
disk1	123.123.11.1	A corp. type 342	compiler A
disk2	123.123.11.2	B corp. type F01	compiler B
		⋮	

Fig. 23

